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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/928,764	08/13/2001	Franklin E. Parks	44446A	8760

7590 09/06/2002

Locke, Liddell & Sapp, LLP  
3400 Chase Tower  
600 Travis Street  
Houston, TX 77002-3095

EXAMINER

SERGEANT, RABON A

ART UNIT	PAPER NUMBER
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1711

DATE MAILED: 09/06/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.  
09/928,764

Applicant(s)  
Parks et al.

Examiner  
Rabon Sergeant

Art Unit  
1711



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE three MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on Jun 11, 2002
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claims \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some\* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\*See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☒ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s). 4 6) ☐ Other:

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1. Claims 3, 4, 10, 15, and 16 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Applicants have failed to specify the type (number average or weight average) of molecular weight or the means by which the molecular weight has been determined. In the absence of such information, the identities of the polyol species are unclear; therefore, the claims lack adequate enablement.

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to

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the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

3. Claims 1-5, 7, 9-11, 13-16, and 18 are rejected under 35 U.S.C. 102(a or b) as being anticipated by WO 98/41554 or GB 1,243,604 or Berger et al. ('310) or Mallonee ('575).

Each reference discloses polyurethane coating compositions, which yield films when applied to a substrate, wherein a nonionic isocyanate terminated prepolymer is produced and subsequently dispersed in water in the presence of an emulsifying agent, such as an anionic surfactant. Each reference further discloses that solvents are not required components and teaches how the use of solvents may be avoided. See abstract and pages 1-11, 14, and 15 within WO 98/41554. See pages 1-4 within GB 1,243,604. See columns 1-7 within Berger et al, especially column 6, lines 60+. See columns 1-4 within Mallonee, especially column 2, lines 5-21. The position is further taken the disclosed dispersions possess applicants' claimed solids content.

4. Claims 1-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Markusch ('008).

Markusch describes the production of nonionic polyurethane prepolymers and their dispersion and chain extension within water. See abstract and columns 2-8, 11, and 13. It is noted that the disclosed ionic groups are optional. Furthermore, Markusch teaches that solvent use is optional and that external emulsifiers may be used within the dispersion. See column 13,

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lines 17-20. Lastly, patentee discloses that the dispersion has particle sizes below 1 micron (column 12, lines 47-55) and that the solids contents meet those claimed by applicants (examples).

5. While Markusch discloses the use of external emulsifiers within the dispersions, the reference fails to teach the sole use of anionic surfactants to disperse the prepolymer. However, the use of anionic surfactants to disperse polyurethane prepolymers within water was well known within the art at the time of invention. This position is supported by the teachings of the secondary references, as discussed within paragraph 3 of this Office action.

6. Therefore, since anionic surfactants were known emulsifiers for dispersing polyurethane prepolymers within water, the position is taken that it would have been *prima facie* obvious to employ such surfactants for their art recognized utility within the method of Markusch, so as to arrive at the instant invention.

7. It is noted that before the incorporation of ionic groups or hydrophilic groups within polyurethanes, the use of external emulsifiers was the accepted means of producing stable aqueous polyurethane dispersions.

Any inquiry concerning this communication should be directed to R. Sergent at telephone number (703) 308-2982.

  
RABON SERGENT  
PRIMARY EXAMINER

R. Sergent

September 4, 2002